

Shall we search all trial registers? A comparison study of the sensitivity of five trial registers used by the Cochrane Skin Group

Background: Cochrane review authors are required to search trials registers for relevant trials to avoid missing unpublished evidence. The Cochrane Skin Group advises review authors to search the metaRegister of controlled trials (mRCT), ClinicalTrials.gov (CT), the World Health Organization International Clinical Trials Registry Platform (ICTRP), the Australian New Zealand Clinical Trials Registry (ANZCTR), and the EU Clinical Trials Register (EUCTR). However, searching multiple trial registers is a tedious task.

Objective: To compare the sensitivity of the five trial registers used by the Cochrane Skin Group in identifying relevant studies.

Methods: The five registers were searched on 11th Apr 2012 for relevant studies for two Cochrane reviews that the author was involved. The sensitivity of a register was defined as the proportion of relevant trials identified in that register to all relevant trials.

Results: For the first Cochrane review, the sensitivity for mRCT, CT, ICTRP, ANZCTR, and EUCTR was 0.57, 0.57, 0.86, 0 and 0.43, respectively. A completed and published trial was mislabelled as 'recruiting' or 'unknown' in the mRCT, CT, and ICTRP. For the second Cochrane review, the sensitivity for mRCT, ClinicalTrials.gov, ICTRP, and ANZCTR was 0.40, 0.56, 0.81, 0.02, and 0.25, respectively.

Conclusions: The sensitivity of the ICTRP was the best, while the ANZCTR was the worst. However, the limitation of this result was based on the searching exercise for two Cochrane reviews. No single trial register encompasses all relevant trials and provide correct status information. Authors should keep current strategy of searching all trial registers, and recheck the status information provided by trial registers. There is room for improvement of the sensitivity and the accuracy of trial status information by frequent updating and collaboration between registers.